

BLOOMSBURG TRAILER PARK (PWSNO 1280018) SOURCE WATER ASSESSMENT REPORT

January 30, 2002



State of Idaho Department of Environmental Quality

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SOURCE WATER ASSESSMENT FOR BLOOMSBURG TRAILER PARK

Under the Federal Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. The Idaho Department of Environmental Quality is completing the assessments for all Idaho public drinking water systems. The assessment for your particular drinking water source is based on a land use inventory within the well recharge zone, your water quality history, construction characteristics associated with your well or wells, and site specific sensitivity factors associated with the aquifer your water is drawn from.

This report, *Source Water Assessment for Bloomsburg Trailer Park* describes the public drinking water source, potential contaminant sites located within a 1000-foot boundary around the drinking water source, and the susceptibility (risk) that may be associated with any potential contaminants. This assessment, taken into account with local knowledge and concerns, should be used as a planning tool to develop and implement appropriate protection measures for this system. **The results should not be used as an absolute measure of risk and are not intended to undermine the confidence in your water system.**

Potential Contaminant Inventory. The Bloomsburg Trailer Park public water system, located on the Western shore of Lake Coeur d'Alene near Worley, Idaho, serves 25 seasonal trailers and two homes. The estimated capacity of the well is 100 GPM. The recharge zone for the well was modeled as 1000-foot radius circle with the well as its center.

No potential contaminant sources are documented inside the well recharge zone. The well is more than 800 feet from the lake and about 325 feet from a small stream that empties into Bloomsburg Bay. A site inspection March 21, 2001, determined that the well is not influenced by surface water. The well is up hill from the trailer park, and situated in an un-irrigated field.

Water Quality History. Bloomsburg Trailer Park, under regulation as a non-community transient public water system since 1987, is required to monitor quarterly for bacterial contamination. The park has had recurrent problems with bacteria, which appear to be confined to the distribution system. The last positive bacterial sample from the well tap was drawn in July 1994. The system has been disinfected periodically with high doses of chlorine, but is not required to chlorinate continuously.

The system tests annually for nitrates. Concentrations have ranged between 1.35 mg/l and 2.23 mg/l. The Maximum Contaminant Level (MCL) for nitrate is 10 mg/l.

Well Construction. The Bloomsburg Trailer Park well was drilled in 1986 to a depth of 277 feet. The 8-inch steel casing extends from 20 inches above the ground surface to a depth of 98 feet. The casing terminates in a basalt layer. The static water level in the well is 135 feet. Current Idaho Department of Water Resources standards for drinking water wells require the casing to extend at least 5 feet below the water table. The bentonite clay surface seal is 18 feet deep, terminating in a clay layer. The well is fitted with a vented, watertight well cap.

Well Site Characteristics. Soils in the well recharge zone are generally in the poorly to moderately well drained class. Poorly drained soils protect against migration of contaminants toward the well. The soil structure above the water table in the well is predominately clay and unbroken basalt. The clay layers above the ground water level have a combined thickness of 77 feet.

Susceptibility to Contamination. A susceptibility analysis DEQ conducted on the Bloomsburg Trailer Park well, incorporating information from the public water system file and the potential contaminant inventory, found the well to be at low risk for contamination. The susceptibility analysis worksheet for your well on page 6 this report shows how your well was scored. Formulas used to compute the final susceptibility scores are at the bottom of the worksheet.

Source Water Protection. This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

Bloomsburg Trailer Park is in compliance with *Idaho Rules for Public Drinking Water Systems*, and has completed all repairs recommended following sanitary surveys of the system. Voluntary drinking water protection measures the system might want to consider include covering the well head and fencing the well lot to keep livestock and wild life out. Use of fertilizer and other agricultural chemicals is prohibited entirely on the well lot. Their use should be limited as much as possible inside the 1000-foot recharge zone delineated for your well.

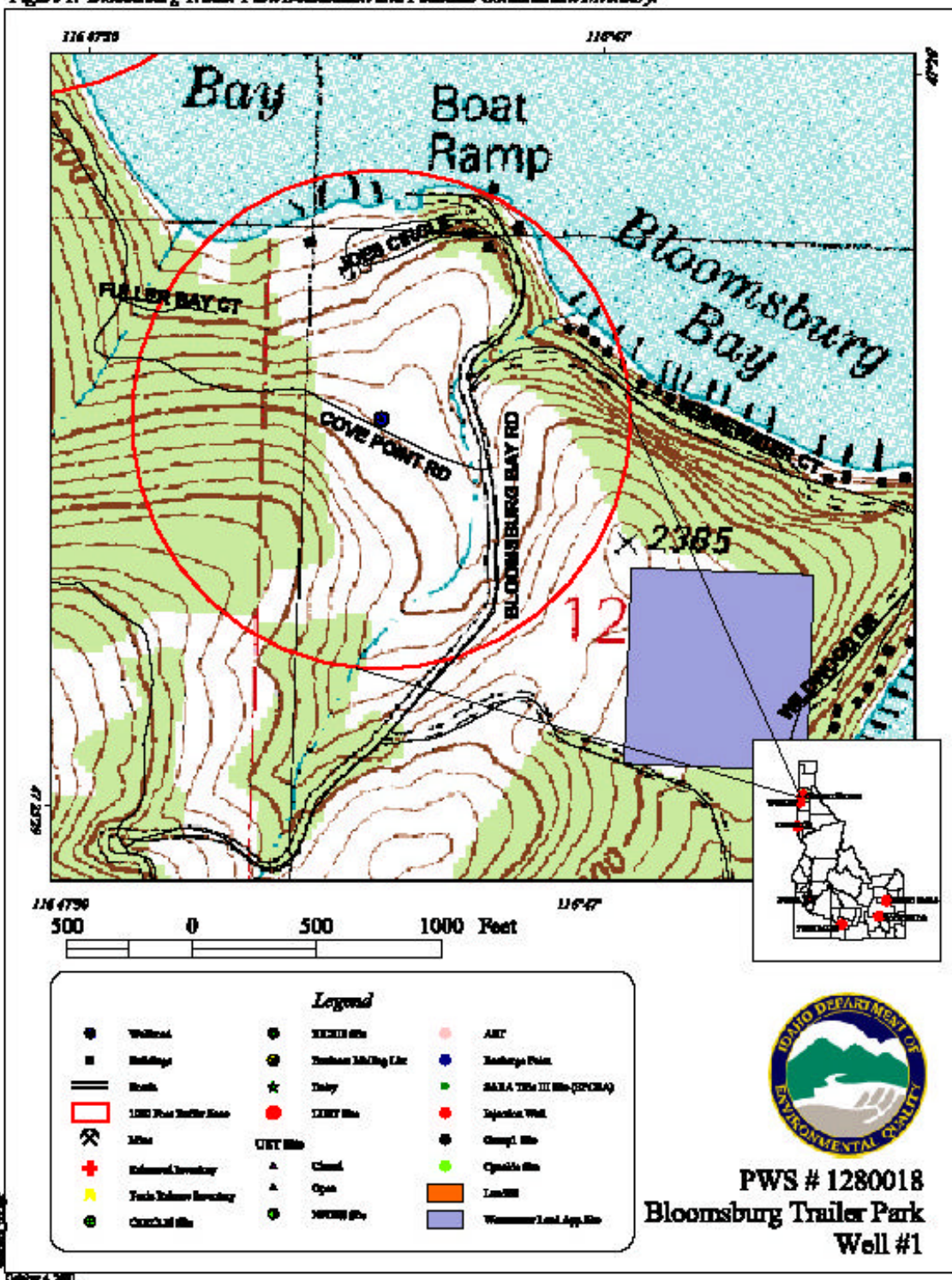
Because the water system may not have direct jurisdiction over the entire recharge zone for its well, it will be important to form partnerships with neighbors, and public agencies to regulate land uses that can degrade ground water quality. The goal of source water protection is to maintain current water quality for the future despite the changes we can expect with population growth in North Idaho.

For assistance in developing source water protection strategies please contact Tony Davis at the Coeur d'Alene Regional DEQ office at 208 769-1422.

DEQ website:

<http://www.deq.state.id.us>

Figure 1. Bloomsburg Trailer Park Delineation and Potential Contaminant Inventory.



Ground Water Susceptibility

Public Water System Name :

BLOOMSBURG TRAILER PARK

Well# :

WELL #1

Public Water System Number :

1280018

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1. System Construction		SCORE			
Drill Date	7/1/86				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES 2001				
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	YES	0			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		2			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	YES	0			
Vadose zone composed of gravel, fractured rock or unknown	NO	0			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	YES	0			
Total Hydrologic Score		1			
3. Potential Contaminant / Land Use - ZONE 1A		IOC	VOC	SOC	Microbial
		Score	Score	Score	Score
Land Use Zone 1A	NON IRRIGATED AGRICULTURAL LAND	1	1	1	1
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		1	1	1	1
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	NO	0	0	0	0
(Score = # Sources X 2) 8 Points Maximum		0	0	0	0
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	25-50% NON IRRIGATED AGRICULTURAL LAND	1	1	1	1
Total Potential Contaminant Source / Land Use Score - Zone 1B		1	1	1	1
Cumulative Potential Contaminant / Land Use Score		2	2	2	2
4. Final Susceptibility Source Score		4	4	4	4
5. Final Well Ranking		Low	Low	Low	Low

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.27)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.35)

Final Susceptibility Ranking:

- 0 - 5 Low Susceptibility
- 6 - 12 Moderate Susceptibility
- > 13 High Susceptibility

POTENTIAL CONTAMINANT INVENTORY LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as Superfund is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.